



# Warren County District Landfill Oxford, New Jersey

Pollution Control Financing Authority
Of Warren County

January 6, 2004

Washington, DC

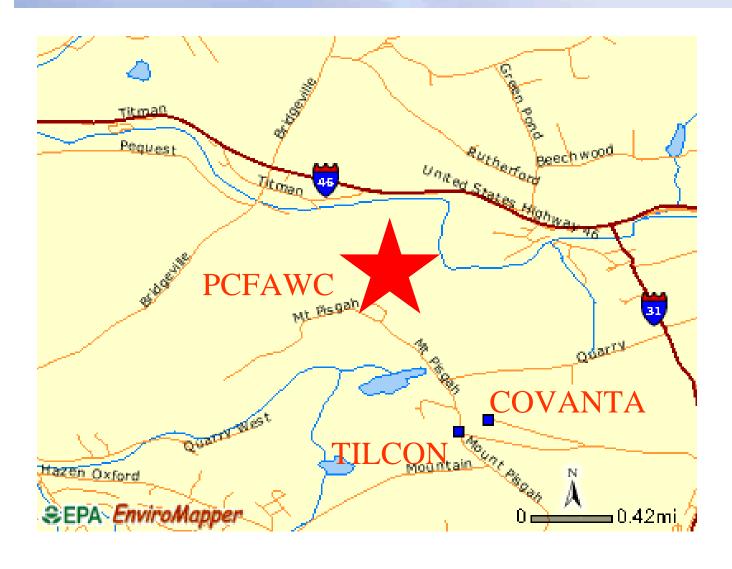
#### **Landfill Overview**



- Owner Pollution Control Financing Authority of Warren County (PCFAWC)
- Open Year 1990
- Closure Year 2006 plus expansion
- Waste in Place 2.3 million cubic yards
- Design Capacity 3.0 million cubic yards
  - 4.5 million cubic yards w/ expansion
- Annual Acceptance ~280,000 tons MSW
- Landfill Area 45 acres
- Landfill Depth 115 feet maximum

### **Landfill Location Map**

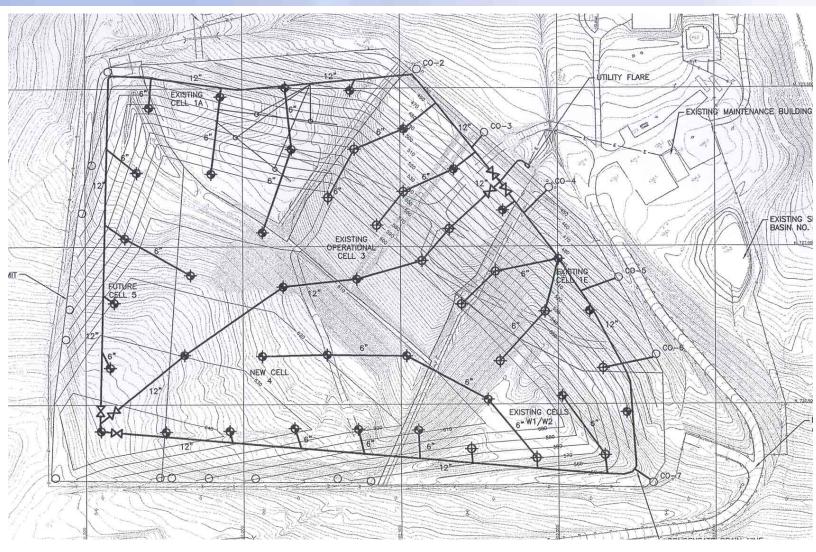






# Landfill Grading and Gas Collection Plan





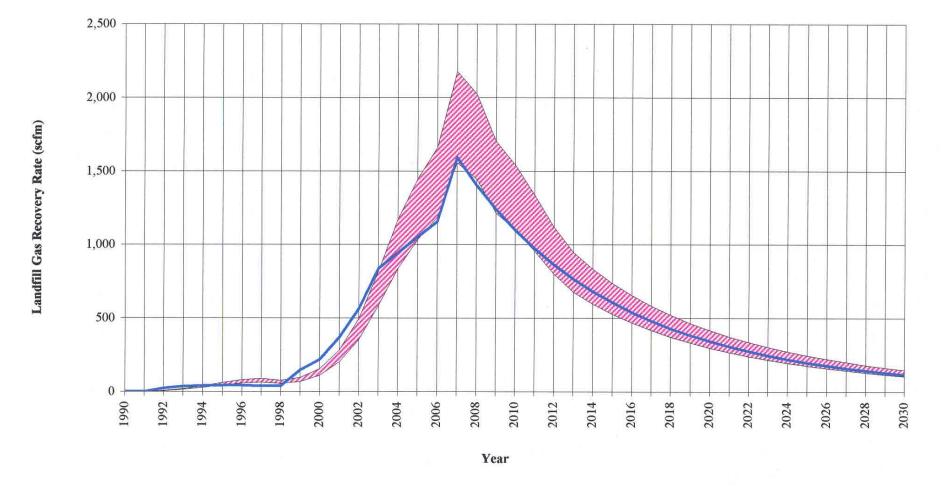
#### **Landfill Gas Generation**



- Wells in Place Yes, 15 (Fall 2002)
- Flare Yes, portable utility flare @ 793 scfm
- 2004 Model Estimation 850-1,200 scfm
- 2007 Model Estimation 1,600-2,300 scfm
- NSPS Applicable? Not currently
- Section 29 Credits No

#### **Gas Model Results**





EPA Model Estimate

EMCON Model Estimate

### **Analyses Completed**



- Temporary LFG system installed
- Wellfield conceptual design
  - Full build-out
- Meetings with local potential end users
- Defined available grants and subsidies
- Feasibility study

#### **Potential End Users**



- PCFAWC
  - The Authority uses 28,000 to 54,000 kWh per month
- Tilcon
  - Asphalt plant uses 10,800 to 14,400 therms/day
  - Electric usage up to 1,200,000 kWh per month
- Covanta
  - Potential use of up to 100% of LFG
- Greenhouse
  - Up to 10 therms/day/acre

# Electrical Generation Opportunities



- New Jersey Board of Public Utilities has potential grants for a percentage of plant capital
- Sell to local utility (Jersey Central/PJM)
  - Interested in discussing green power pricing
- Use 28,000 to 54,000 kWh per month on-site by PCFAWC
- Send electricity to Tilcon with no fee

#### **Contact Information**



John Carlton, Executive Director

Pollution Control Financing Authority of Warren County

Phone: 908-435-2174

Email: jcarlton@nac.net

Mark Swyka, Project Manager

EMCON/OWT, Inc.

Phone: 201-512-5700

Email: Mark.Swyka@shawgrp.com